

A high-contrast, black and white photograph showing a close-up of a textured surface, possibly a book cover or endpaper. The image is characterized by vertical bands of dark and light material, creating a striped effect. A small, dark, rectangular object is visible near the bottom right corner.

Fig. 3

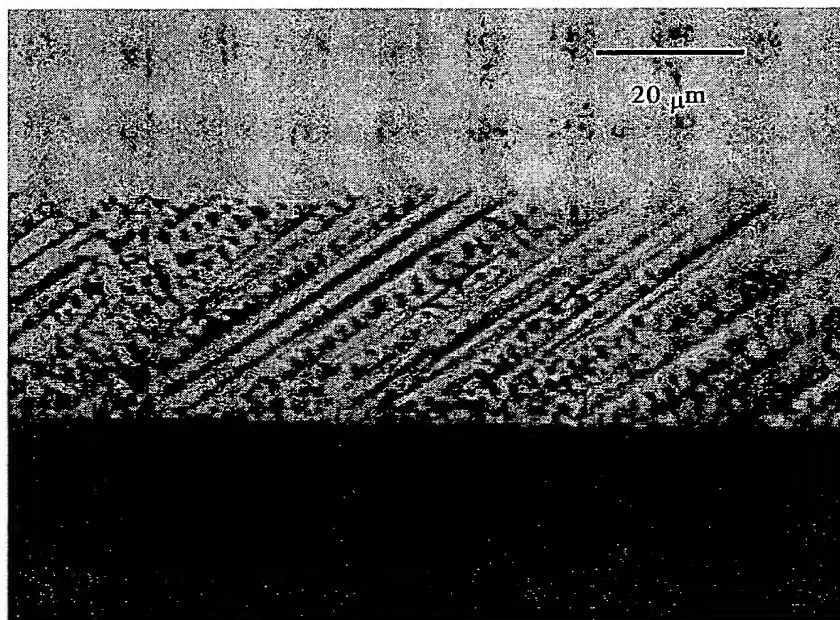


Fig. 4

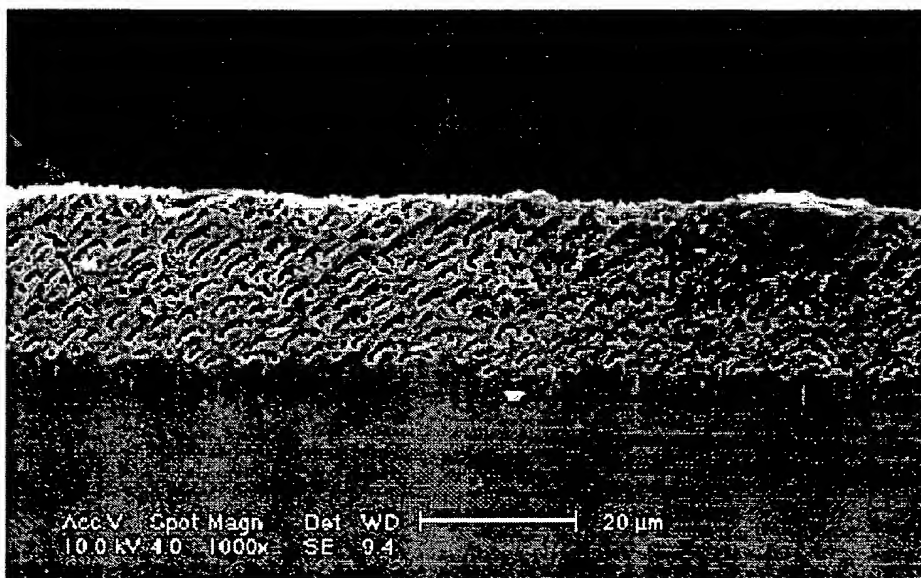


Fig. 5

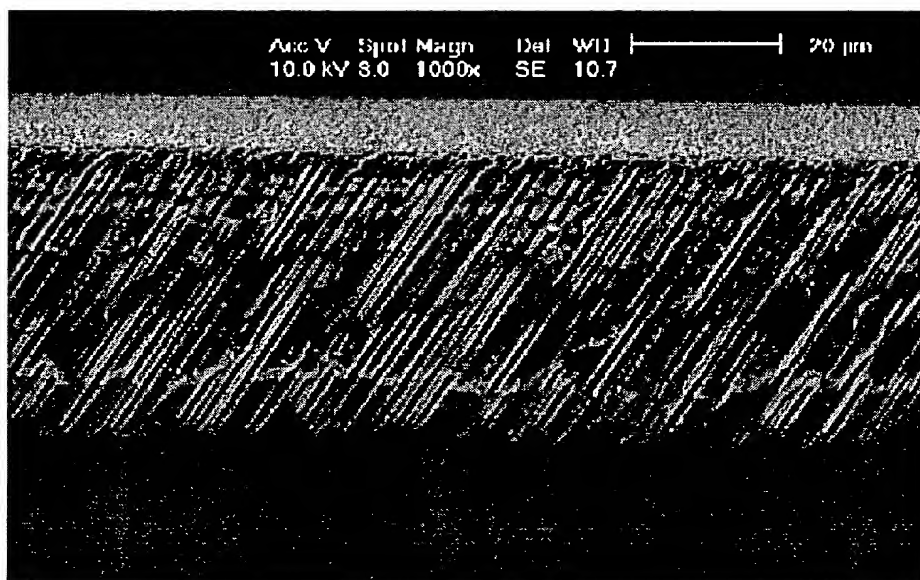
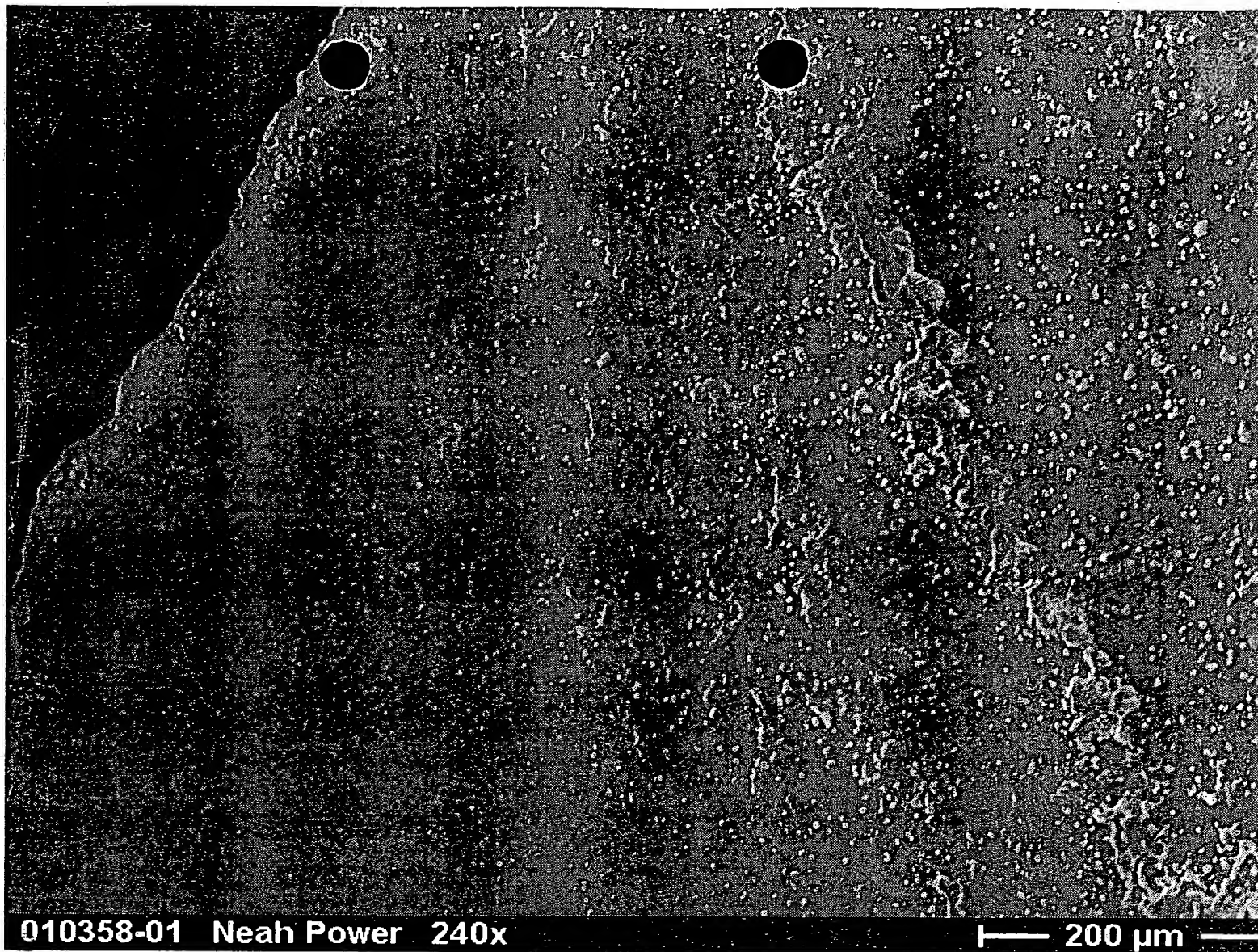


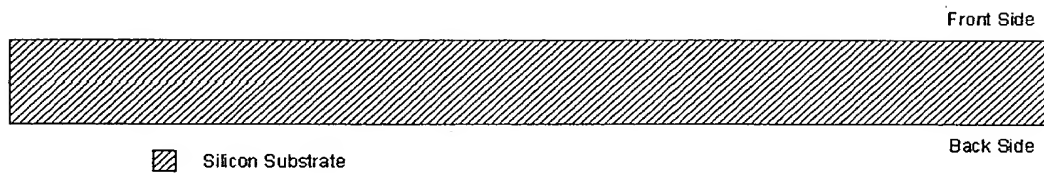
Fig. 6



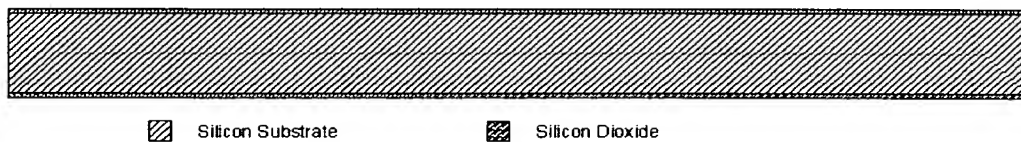
TE

*Fig. 7*

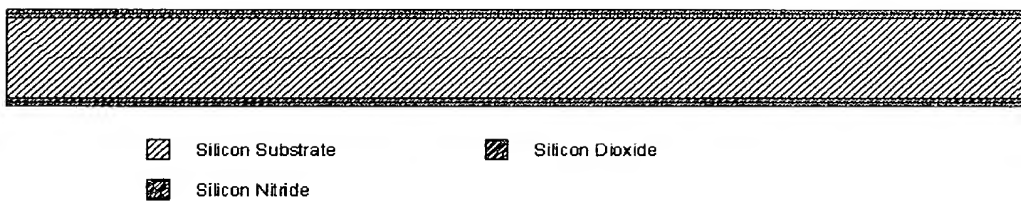




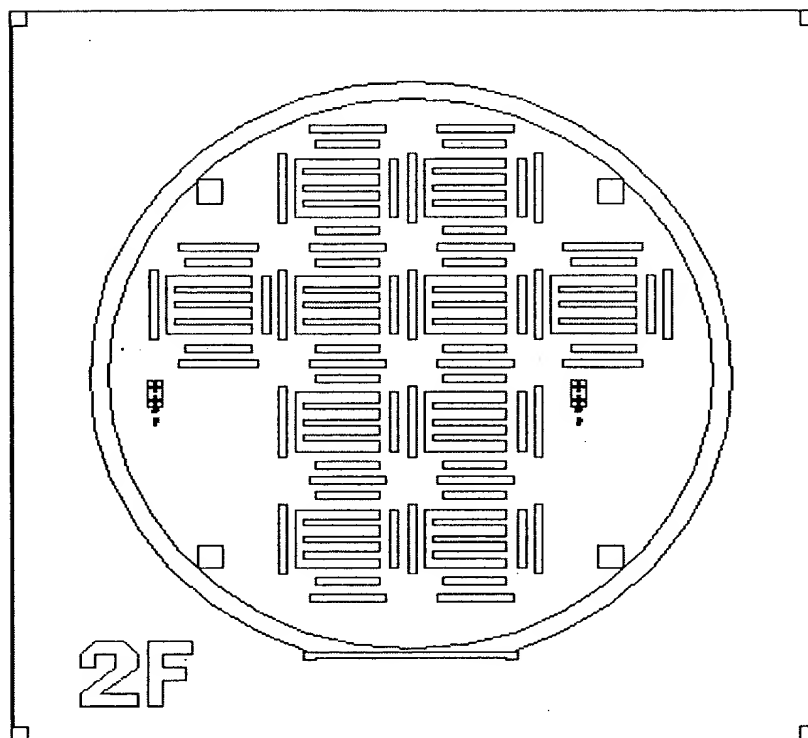
*Figure 8*



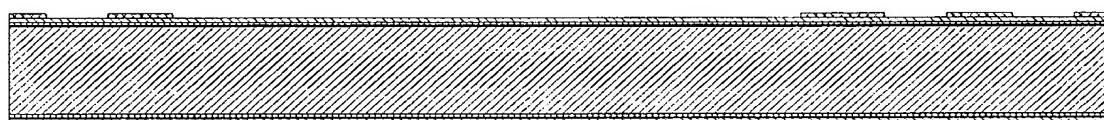
*Figure 9*



*Figure 10*

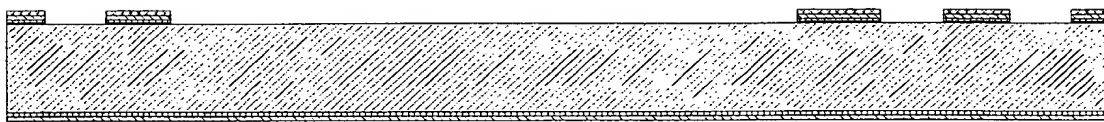


*Figure 11A*



- |   |   |
|---|---|
|  Silicon Substrate |  Photoresist     |
|  Silicon Nitride   |  Silicon Dioxide |

*Figure 11B*



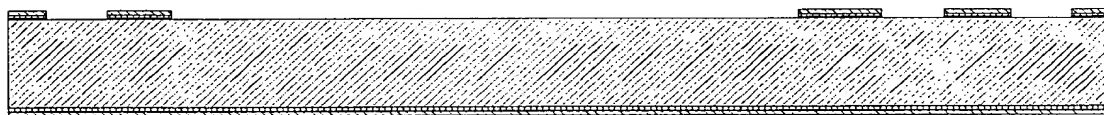
■ Silicon Substrate

■ Photoresist

■ Silicon Nitride

■ Silicon Dioxide

***Figure 12***

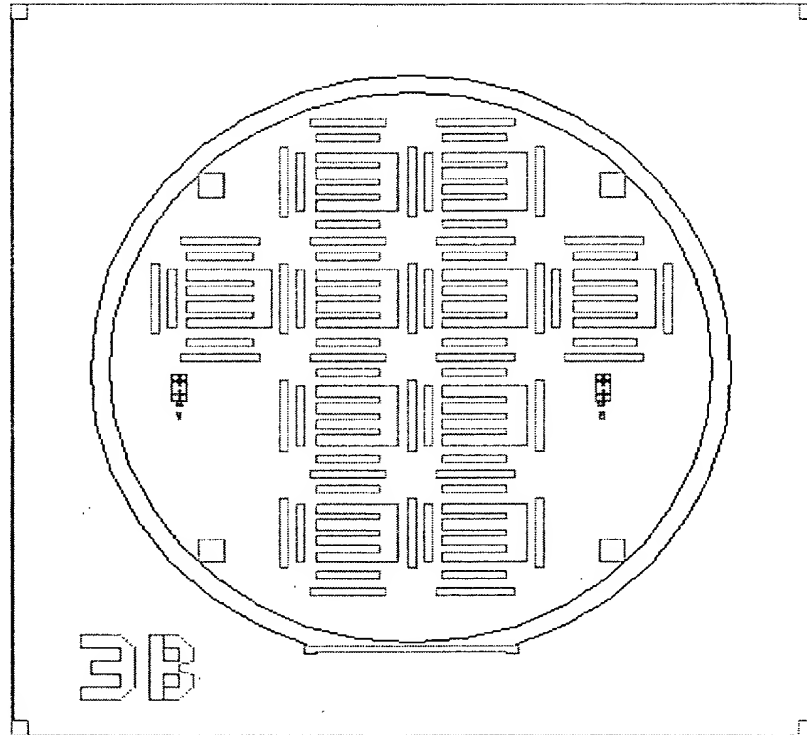


■ Silicon Substrate

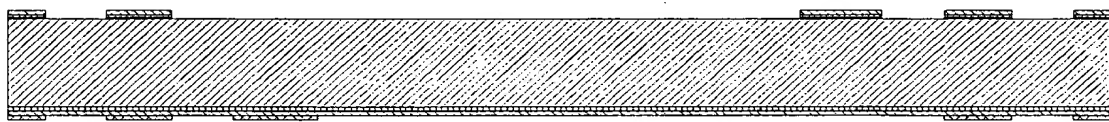
■ Silicon Dioxide

■ Silicon Nitride

***Figure 13***



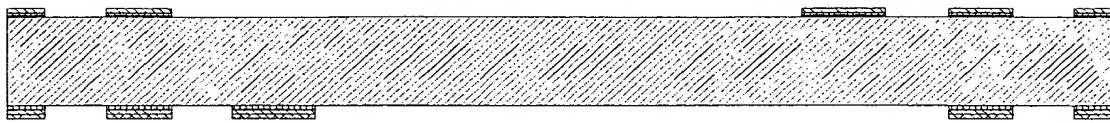
**Figure 14A**



- |   |   |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride   |  Photoresist     |

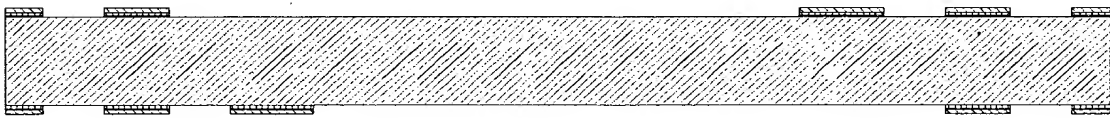
**Figure 14B**





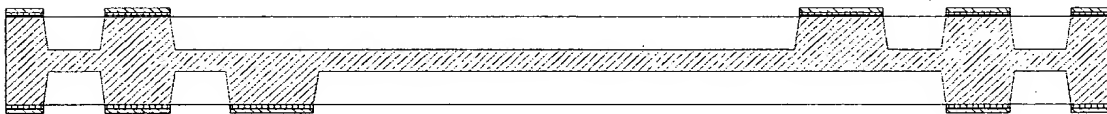
- |   |   |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride   |  Photoresist     |

**Figure 15**



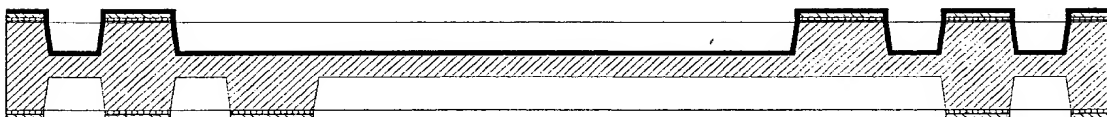
- |   |   |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride   |   |

**Figure 16**



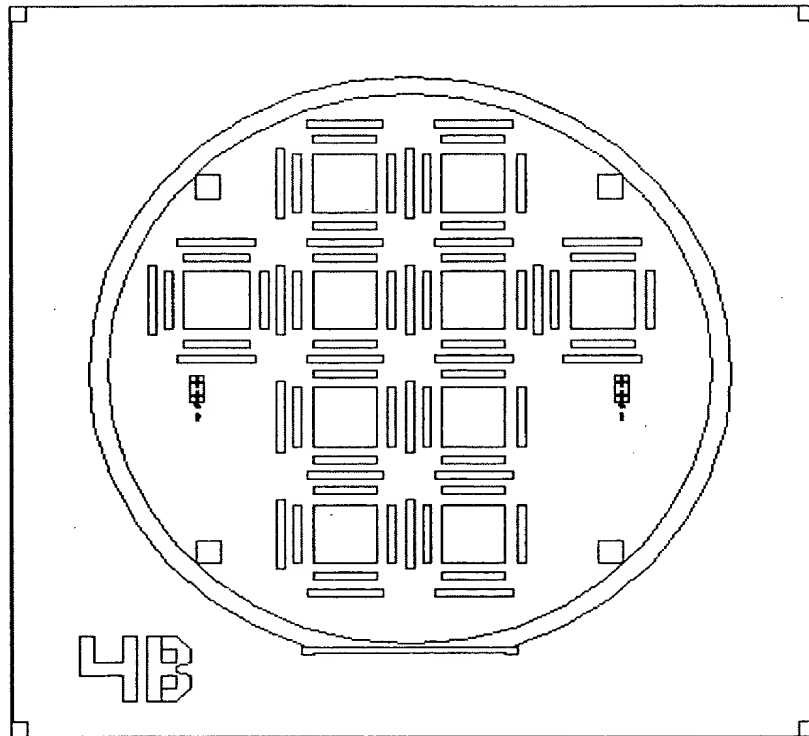
- |   |   |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride   |  Flow Channel    |

**Figure 17**

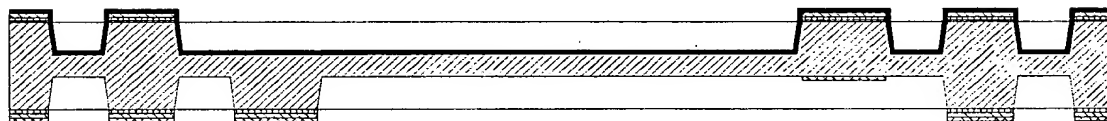


- |   |   |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride   |  Flow Channel    |
|  Ti-W-Au           |   |

**Figure 18**

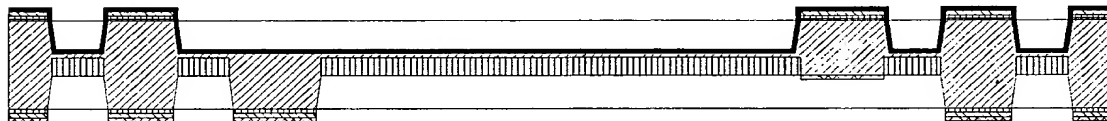


*Figure 19A*



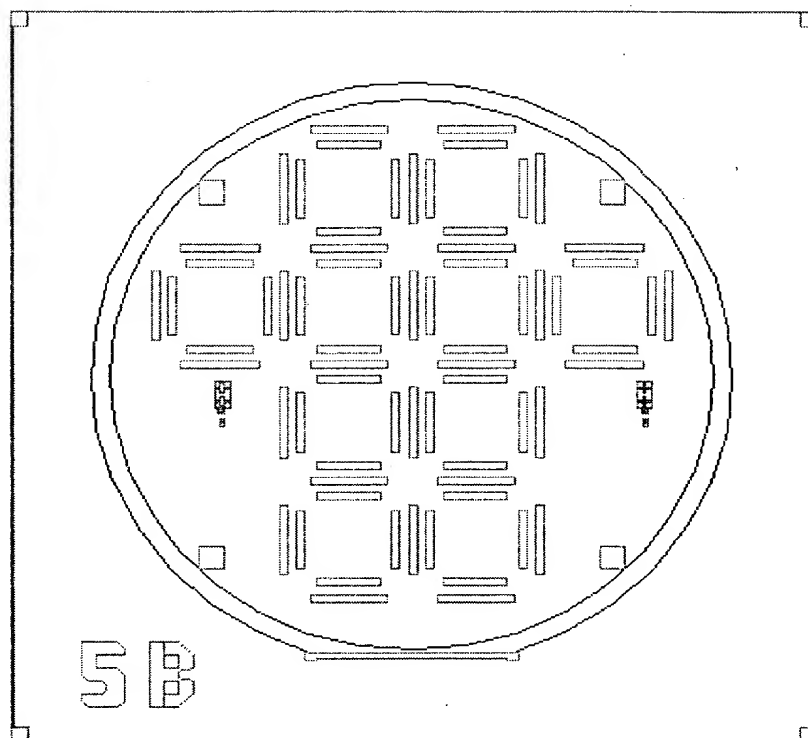
- |                   |                 |
|-------------------|-----------------|
| Silicon Substrate | Silicon Dioxide |
| Silicon Nitride   | Flow Channel    |
| Ti-W: Au          | Photoresist     |

*Figure 19B*

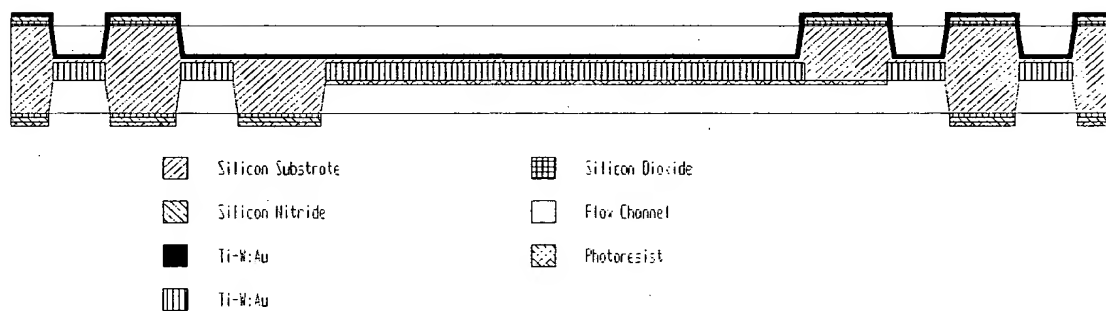


- |                   |                 |
|-------------------|-----------------|
| Silicon Substrate | Silicon Dioxide |
| Silicon Nitride   | Flow Channel    |
| Ti-W: Au          | Photoresist     |
| Ti-W: Au          |                 |

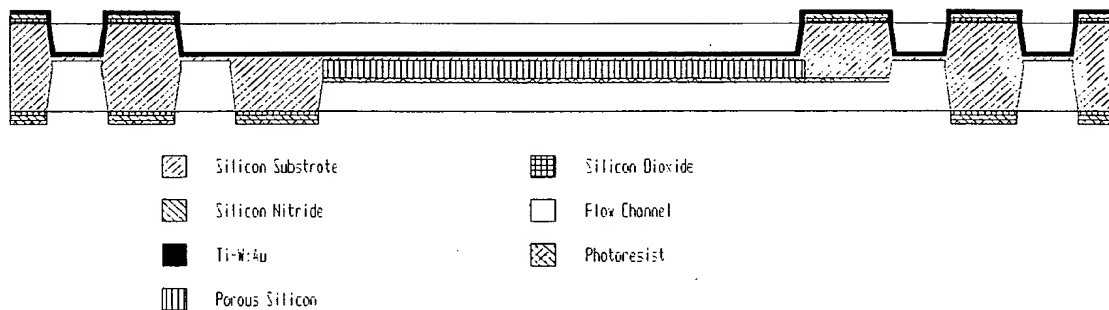
*Figure 20*



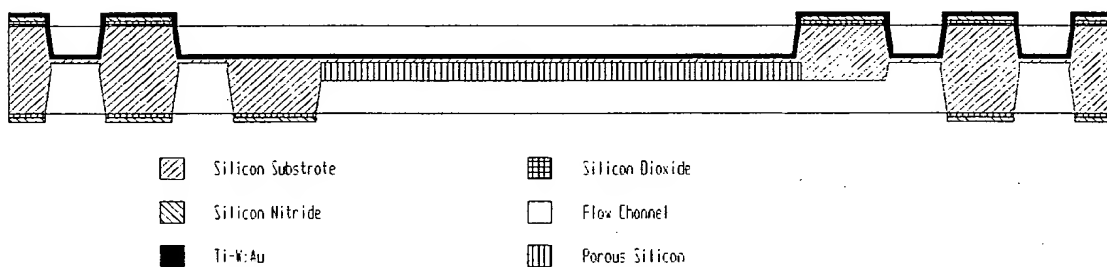
*Figure 21A*



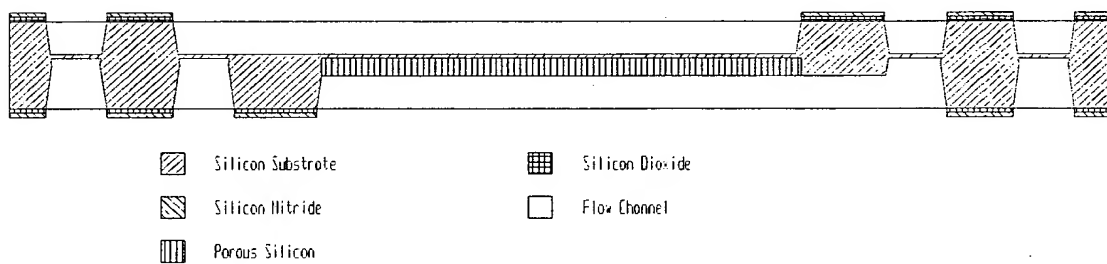
*Figure 21B*



**Figure 22**



**Figure 23**



**Figure 24**

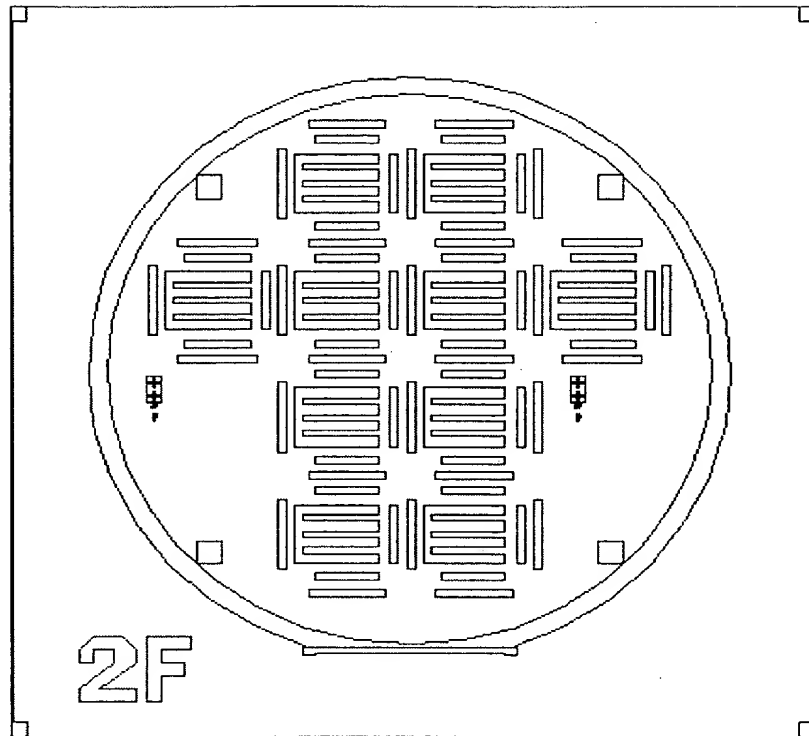


Figure 25A

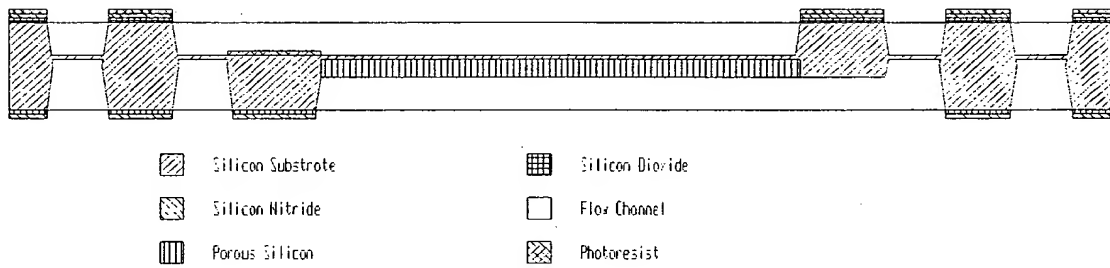
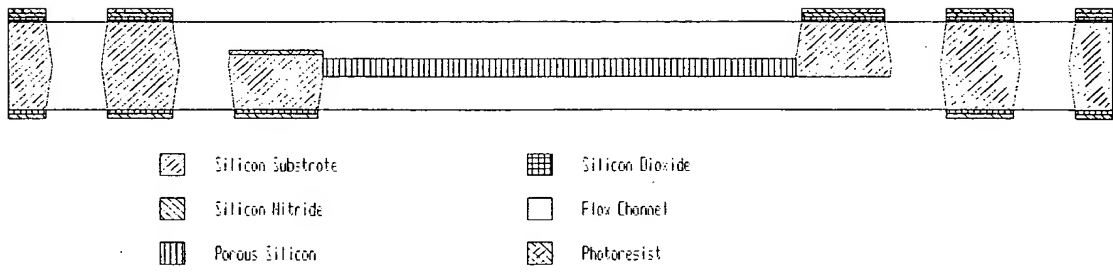
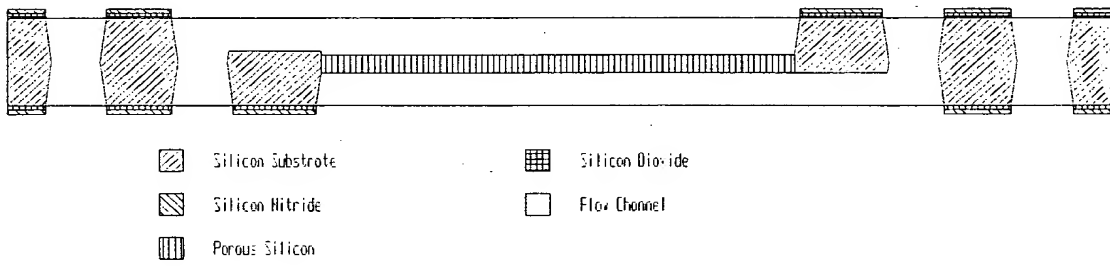


Figure 25B

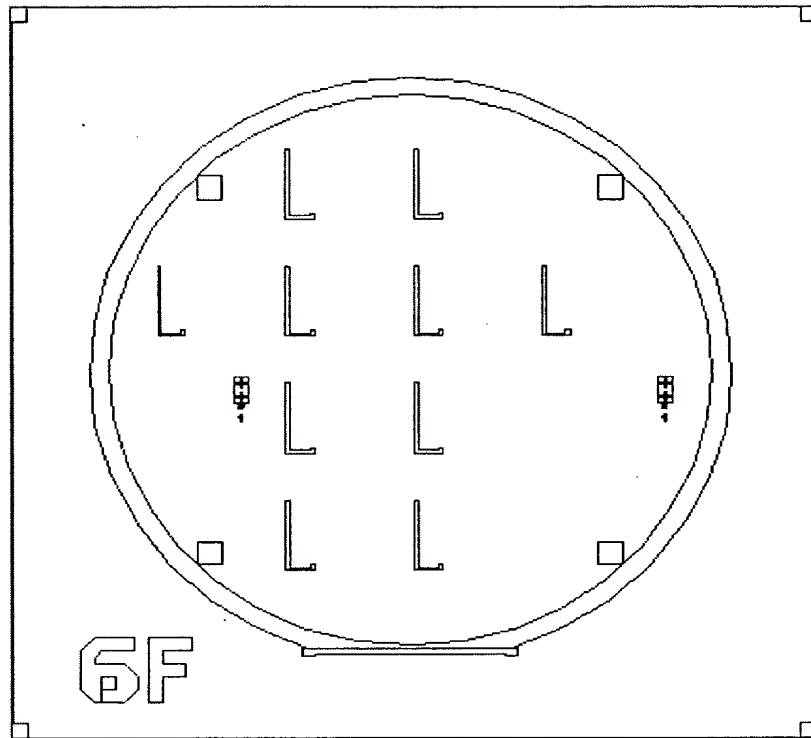


**Figure 26**

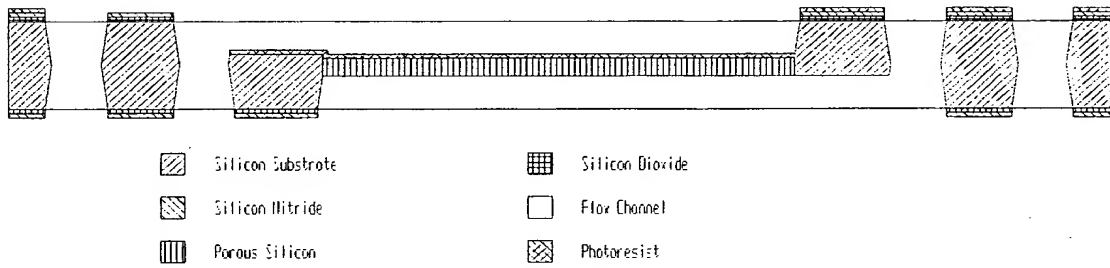


**Figure 27**



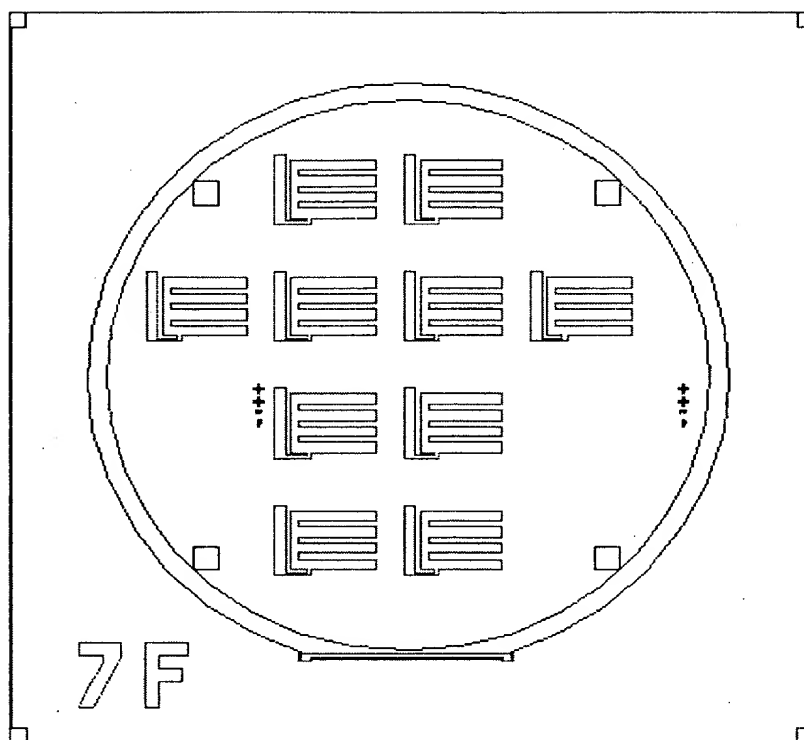


*Figure 28A*

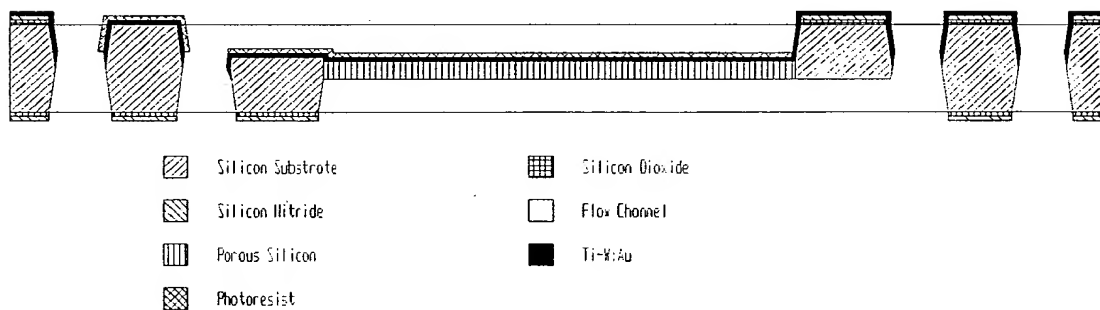


*Figure 28B*



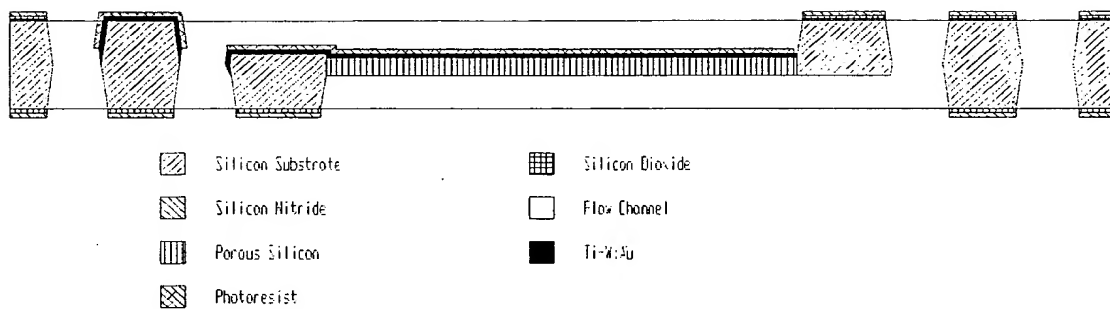


*Figure 32A*

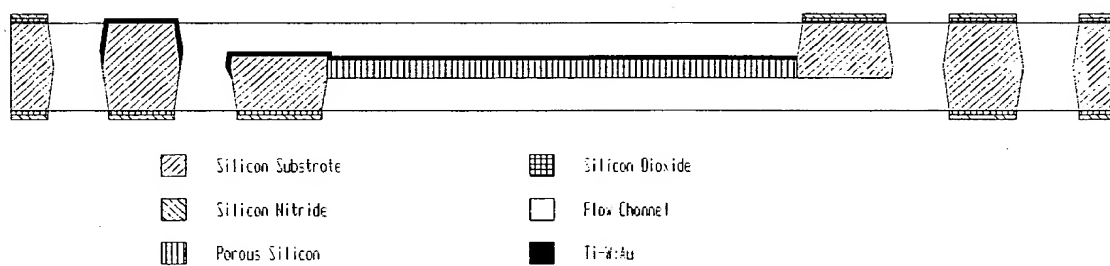


*Figure 32B*

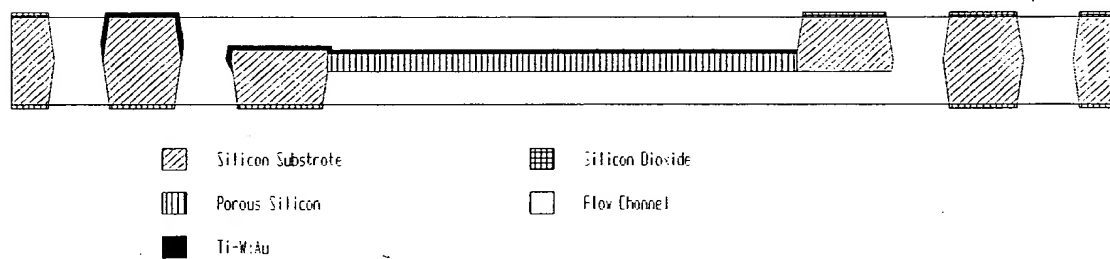
FIG. 40" 98466660



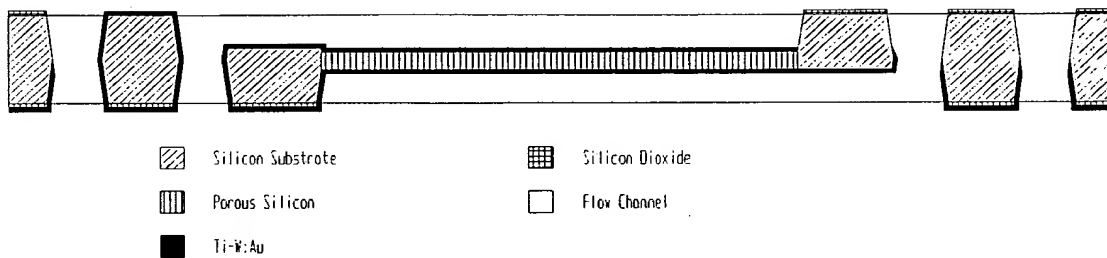
*Figure 33*



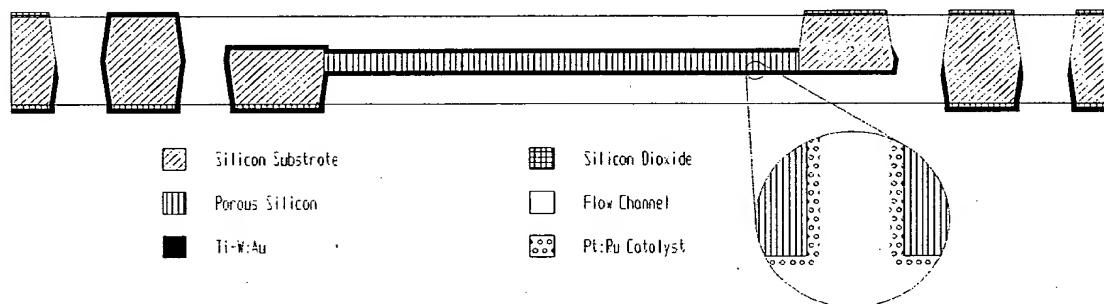
*Figure 34*



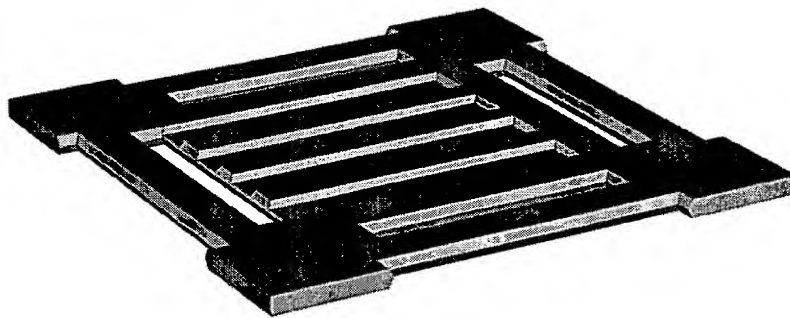
*Figure 35*



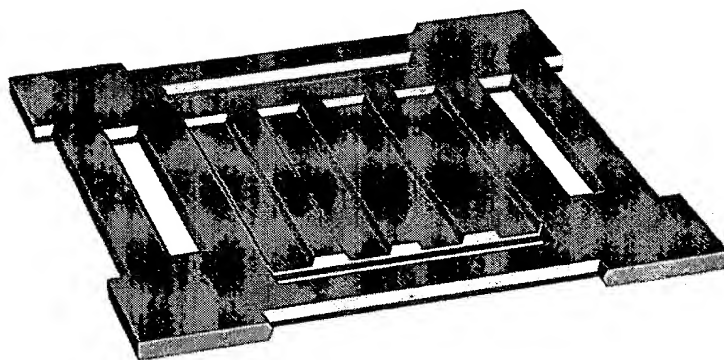
**Figure 36**



**Figure 37**

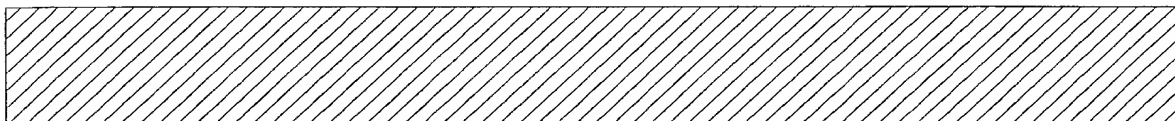



*Figure 38A*



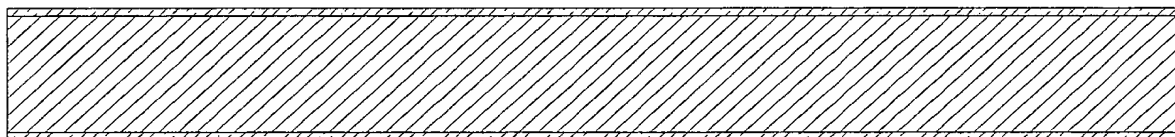
*Figure 38B*






 Silicon Substrate

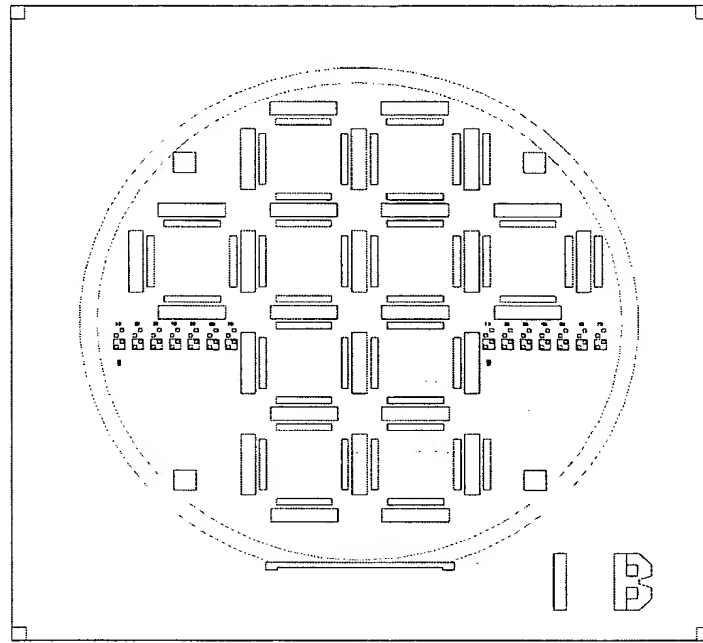
***Figure 39***



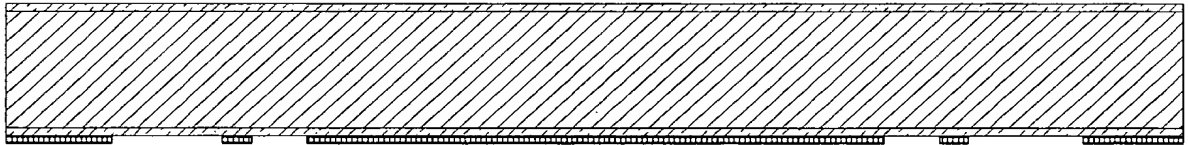
 Silicon Substrate




 Silicon Nitride

***Figure 40***

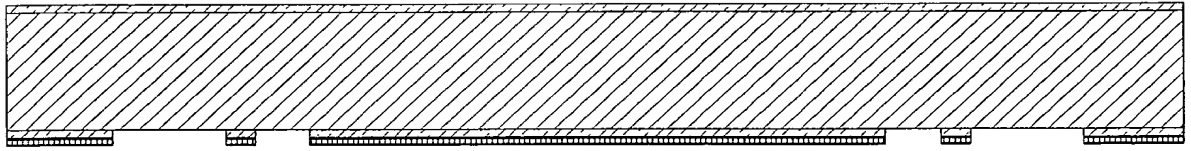



**Figure 41A**




-  Silicon Substrate
-  Silicon Nitride
-  Photo Resists

**Figure 41B**

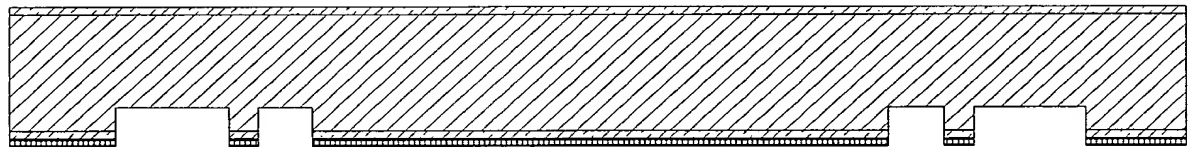



 Silicon Substrate

 Silicon Nitride


 Photo Resists

***Figure 42***



 Silicon Substrate

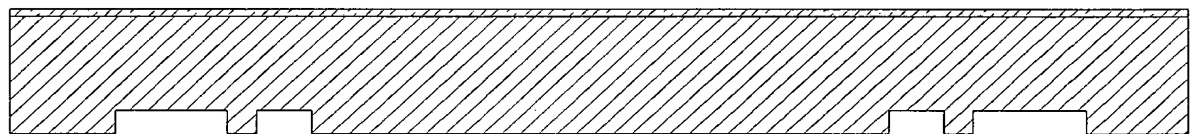
 Silicon Nitride

 Photo Resists

***Figure 43***

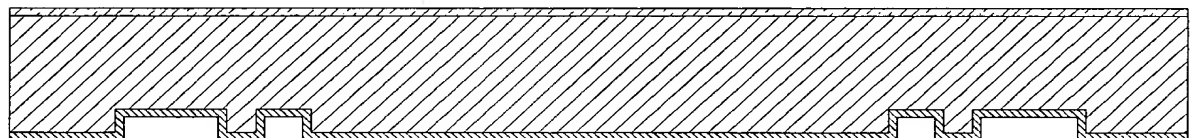
 Silicon Nitride


**Figure 44**



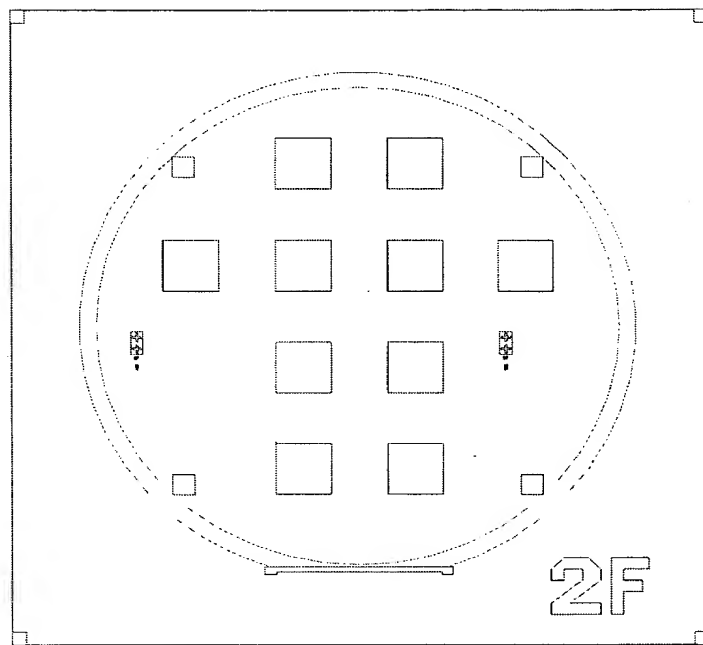
 Silicon Nitride

**Figure 45**

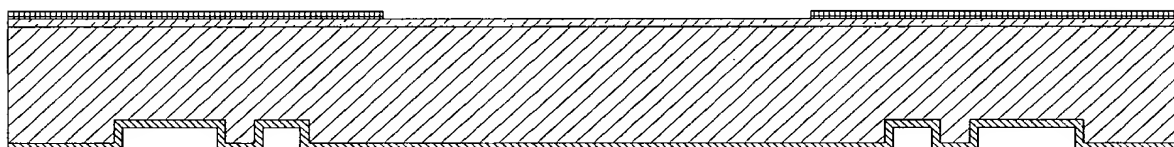






 Aluminum Contact

**Figure 46**

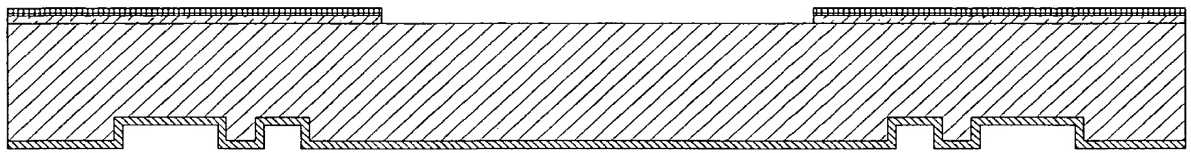






**Figure 47A**



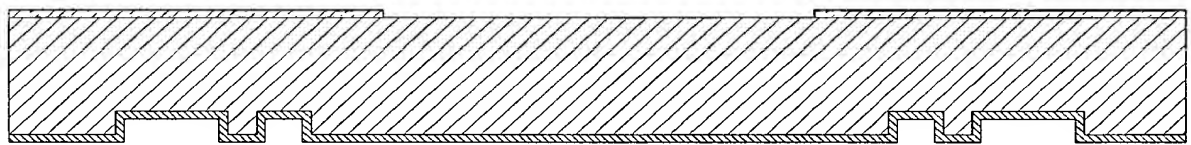
- |   |   |
|---|---|
|  Silicon Substrate |  Photo Resists |
|  Silicon Nitride   |   |
|  Aluminum Contact  |   |




**Figure 47B**



-  Silicon Substrate
-  Photo Resists
-  Silicon Nitride
-  Aluminum Contact

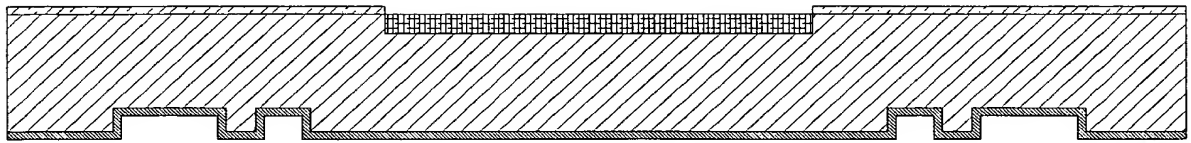
***Figure 48***







-  Silicon Substrate
-  Silicon Nitride
-  Aluminum Contact

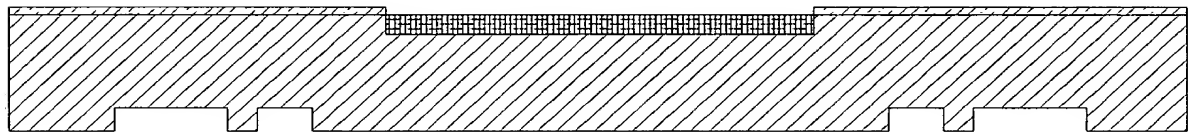
***Figure 49***








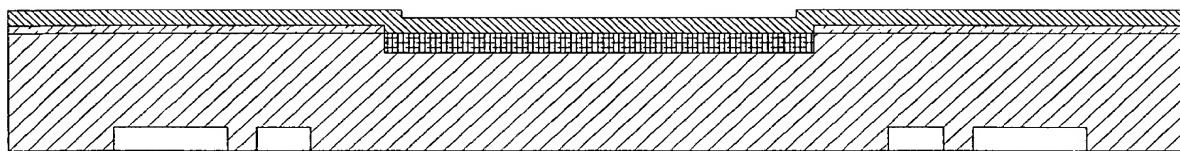
- |   |                   |   |                |
|---|-------------------|---|----------------|
|  | Silicon Substrate |  | Porous Silicon |
|  | Silicon Nitride   |   |                |
|  | Aluminum Contact  |   |                |


***Figure 50***



- |   |                   |   |                |
|---|-------------------|---|----------------|
|  | Silicon Substrate |  | Porous Silicon |
|  | Silicon Nitride   |   |                |

***Figure 51***



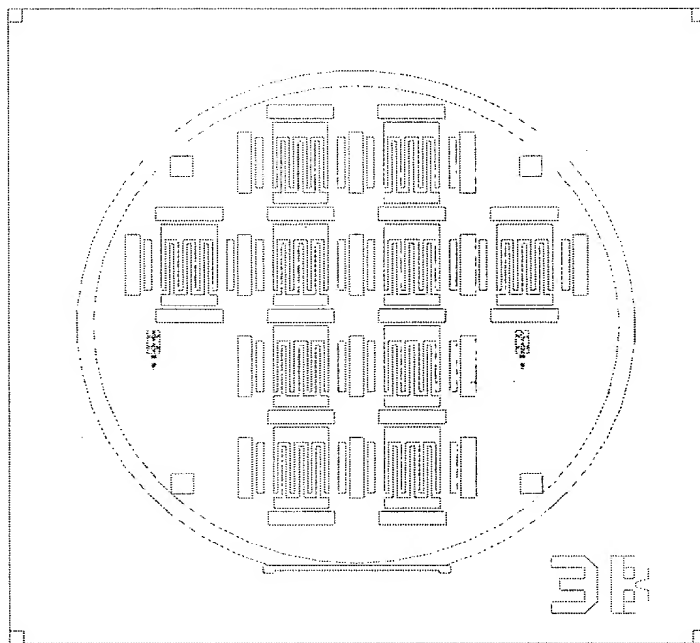
 Silicon Substrate

 Aluminum Contact

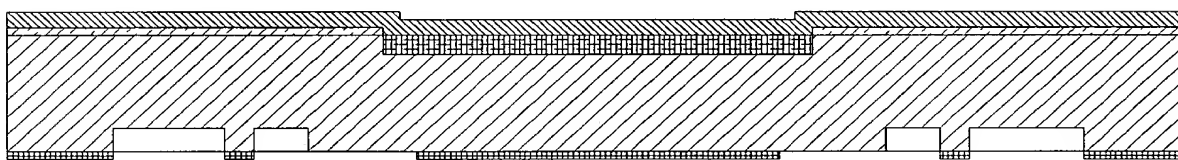
 Silicon Nitride






 Porous Silicon

***Figure 52***

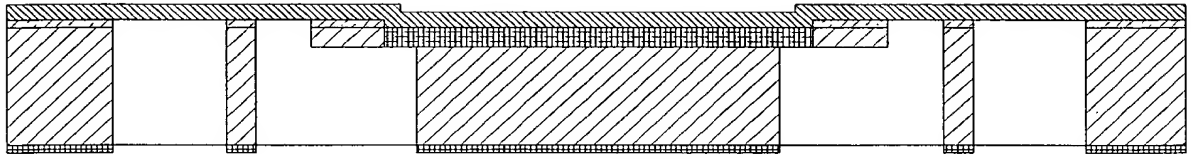







**Figure 53A**



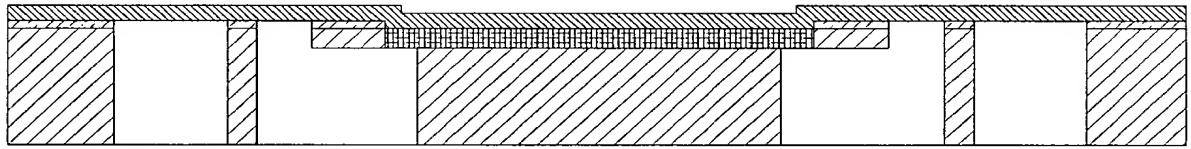
- |   |  |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride   |  Porous Silicon   |
|  Photo Resists     |  |





**Figure 53B**



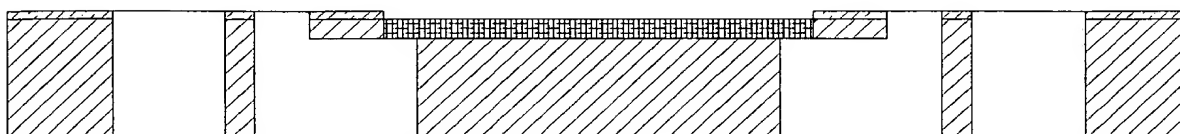
- |   |  |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride   |  Porous Silicon   |
|  Photo Resists     |  |


***Figure 54***



- |   |  |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride   |  Porous Silicon   |

***Figure 55***

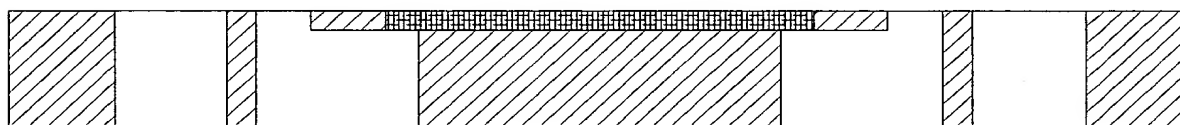



 Silicon Substrate

 Porous Silicon

 Silicon Nitride

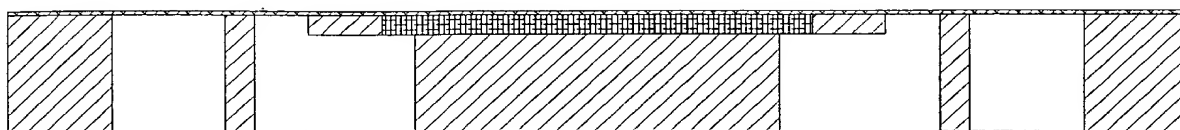
***Figure 56***




 Silicon Substrate


 Porous Silicon

***Figure 57***



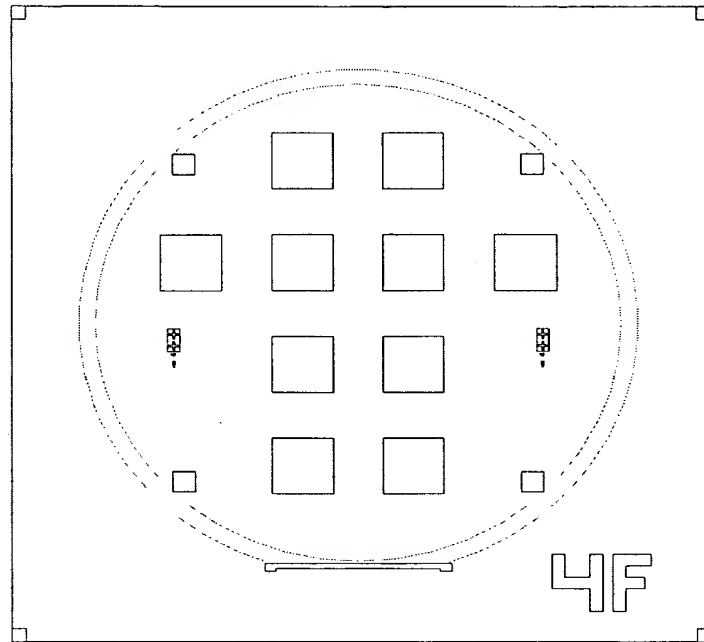
 Silicon Substrate

 Porous Silicon

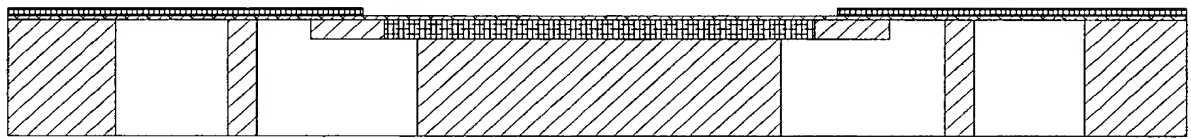
 Metal Seed Layer





***Figure 58***



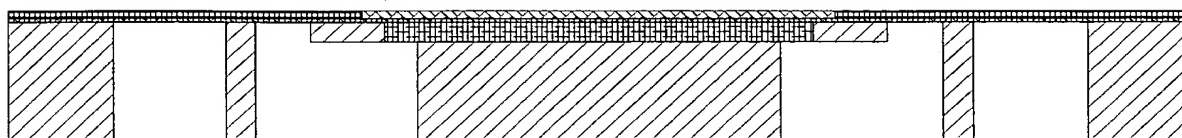



**Figure 59A**



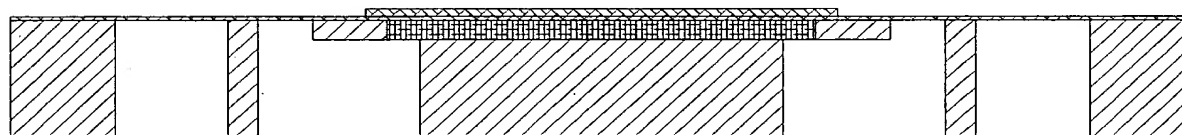
- |   |  |
|---|--|
|  Silicon Substrate |  Photo Resists  |
|  Metal Seed Layer  |  Porous Silicon |



**Figure 59B**



- |   |  |
|---|--|
|  Silicon Substrate |  Photo Resists  |
|  Pd Layer          |  Porous Silicon |

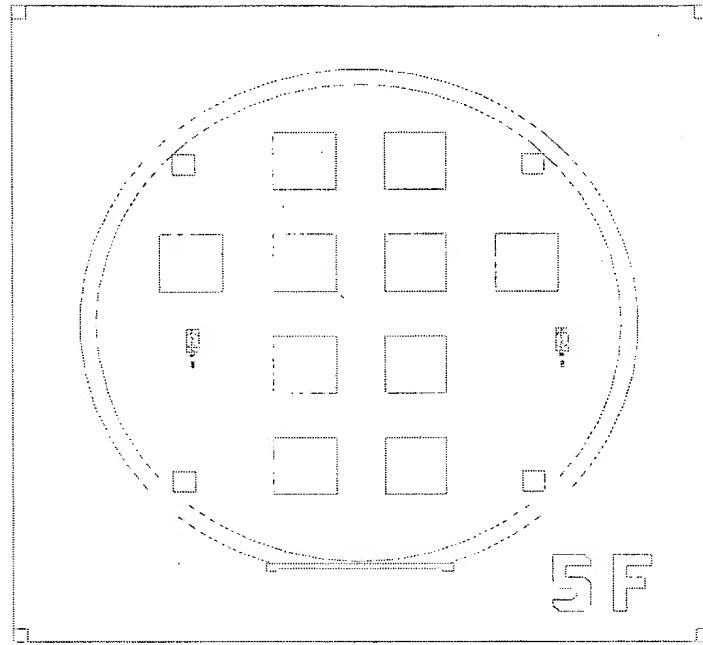
***Figure 60***



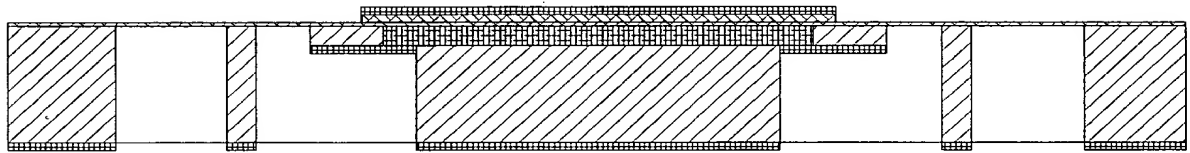
- |   |  |
|---|--|
|  Silicon Substrate |  Porous Silicon |
|  Pd Layer          |  |





***Figure 61***

98266860

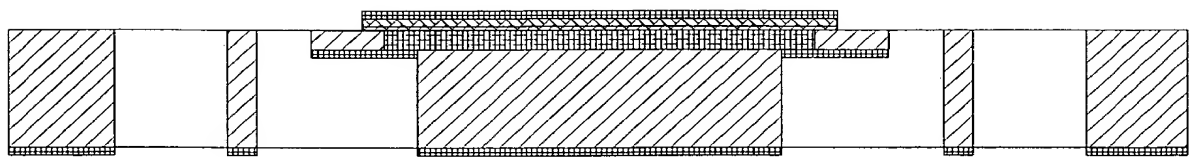






**Figure 62A**



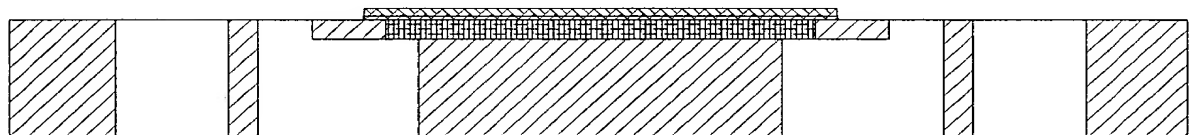
- |   |  |
|---|--|
|  Silicon Substrate |  Porous Silicon |
|  Pd Layer          |  Photo Resists  |




**Figure 62B**



 Silicon Substrate	 Porous Silicon
 Pd Layer	 Photo Resists

***Figure 63***



 Silicon Substrate	 Porous Silicon
 Pd Layer	

***Figure 64***

FIG. 65A

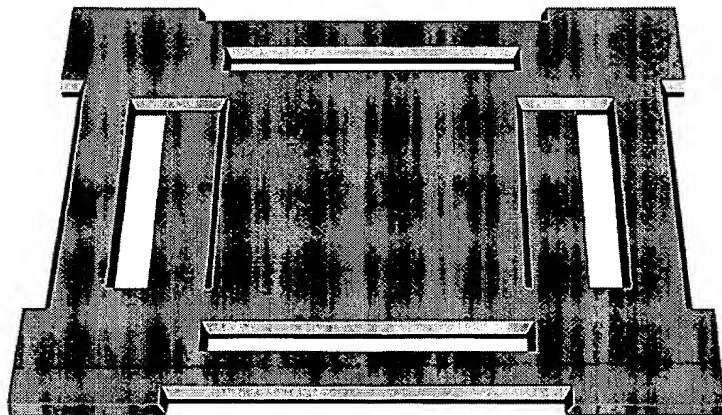


Fig. 65A

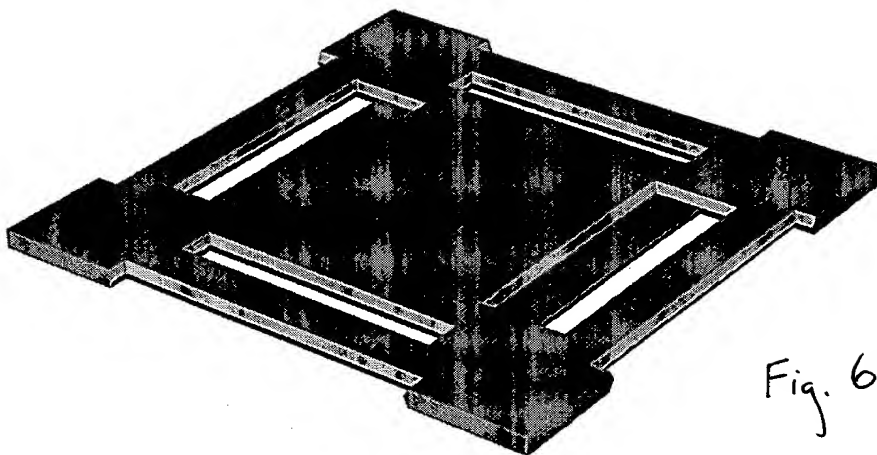


Fig. 65B

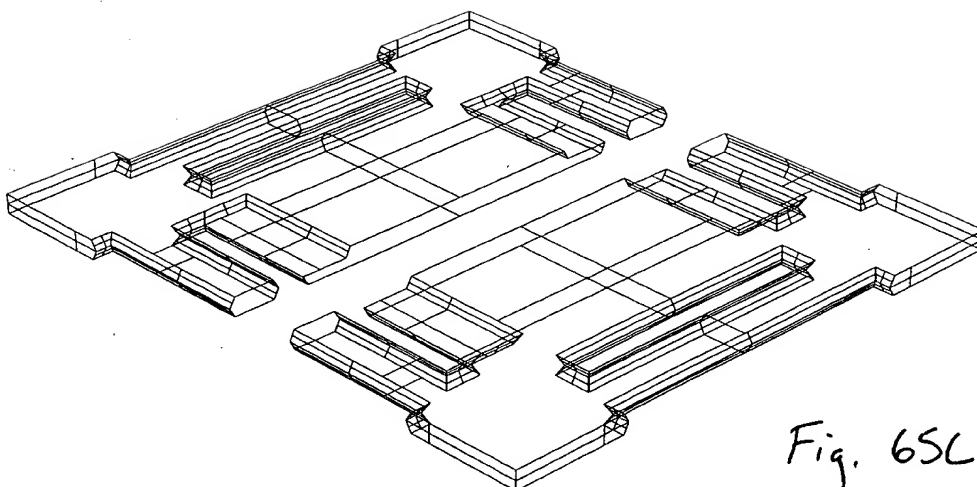


Fig. 65C